Customer No. 30734

Amendments to the Specification

Please replace paragraph [0038] with the following amended paragraph:

[0038] FIGS. 8, 9, and 10 show a second calibration tool 100, one that is compatible

with the sensor subassembly 90 of FIG. 4. An illumination source 102 can be affixed in the

second style of body 104, while three gauge pins 106, 108, and 110 can, as in the previous

configuration, allow precise contact with the reference surfaces 94-98 of FIG. 4 that define the

reference plane 92 of the sensor subassembly 90. In this second embodiment, two spring-loaded

retention hooks [[100]] 112 and [[102]] 114 are shown, which provide the requisite attachment

force.

Please replace paragraph [0046] with the following amended paragraph:

[0046] Adjustment of the alignment of the illumination source 56 may be realized in a

variety of ways, of which the exemplary embodiment, which uses a pivoting bottom point

(internal to the illumination source 56) and a pair of orthogonal adjusting screws 68 and 70, is

one that has been shown to be practical. Another adjustment method can use a non-adjustable

illumination source 56 fixed to the body 40, and can use, for example, threads with jam nuts

[[208]] 206, as shown in FIG. 9, on at least two of the three pins 42, 44, and 46 so that screwing

the pins 42, 44, and 46 in and out and locking them in place, for example with the jam nuts

[[208]] 206, can adjust the direction of the beam of the illumination source 56 with respect to the

plane defined by the tips 54 of the pins 42, 44, and 46.

3

Application No. 10/811,941 Docket No. 87345.2340 Customer No. 30734

Please replace paragraph [0048] with the following amended paragraph:

[0048] Attachment of the gauge pins 42, 44, and 46 to the body 40 may use male screw threads integral to the gauge pins driven into female threaded holes in the body 40. The female threaded holes in the body 40 may be reinforced with inserts, which inserts may be screwed, pressed, pinned, co-molded, or otherwise permanently installed. The gauge pins 42, 44, and 46 themselves may similarly be screwed, pressed, co-molded, vibro-inserted, cryo-pressed, or installed by another suitable technology with or without inserts 200, or may be formed integrally with the body 40, as by molding or machining, where the alignment tool calibration process does not forbid such a method of attachment. The gauge pins 42, 44, and 46 may instead be attached to the body 40 using separate fastenings 202, 204 with unthreaded holes [[60]] 250 in the body 40.